

CLAIMS

1. A method for the preparation of a printing plate comprising forming an oleophilic image on a substrate for a printing plate comprising a support having at least one hydrophilic layer on its surface, the oleophilic image being formed by inkjet printing an aqueous solution or aqueous colloidal dispersion of an anionic oleophilising agent on the surface of the support and drying the applied solution or dispersion, such that on drying the area of the surface to which the solution or dispersion was applied becomes lithographic ink-accepting, characterised in that the hydrophilic layer comprises a crosslinked cationic polymer.
2. A method as claimed in claim 1 wherein the substrate is a metallic, polymeric or paper-based support coated with a layer comprising a crosslinked cationic polymer.
3. A method as claimed in claim 1 wherein the cationic polymer comprises amino groups selected from primary, secondary, tertiary and quaternary amino groups.
4. A method as claimed in claim 1 wherein the cationic polymer is selected from the group consisting of polyalkylenepolyamines and alkylated derivatives thereof, products of addition of alkylcarboxylic acids and polyalkylenepolyamines, products of addition of ketones and polyalkylenepolyamines, products of addition of aldehydes and polyalkylenepolyamines, products of addition of isocyanates and polyalkylenepolyamines, products of addition of isothiocyanates and polyalkylenepolyamines, products of addition of alkylene oxides and polyalkylenepolyamines and products of addition of polyalkylene oxide block copolymers and polyalkylenepolyamines.
5. A method as claimed in claim 1 wherein the cationic polymer is polyethyleneimine.
6. A method as claimed in claim 1 wherein the cationic polymer is present in an amount from 0.01 to 10 g/m².
7. A method as claimed in claim 1 wherein the layer comprising a cationic polymer further comprises inorganic particulate material.

8. A method as claimed in claim 7 wherein the inorganic particulate material is selected from the group consisting of particulate silica, alumina, titanium dioxide and kaolin.
9. A method as claimed in claim 7 wherein the inorganic particulate material is present in an amount from 0.1 to 30 g/m².
10. A method as claimed in claim 1 wherein the anionic oleophilising agent is selected from the group consisting of hydrophobic organic acids and salts thereof.
11. A method as claimed in claim 10 wherein the hydrophobic organic acid is selected from hydrophobic organic carboxylates, sulfonates, sulfates, phosphonates and phosphates.
12. A method as claimed in claim 10 wherein the hydrophobic organic acid is polymeric.
13. A method as claimed in claim 1 wherein the anionic oleophilising agent is present in the aqueous solution or aqueous colloidal dispersion in an amount from 0.02 to 5% by weight.
14. A substrate for a printing plate comprising a support having at least one hydrophilic layer on its surface wherein the hydrophilic layer comprises a crosslinked cationic polymer.
15. A substrate as claimed in claim 14 wherein the support is a metallic, polymeric or paper-based support.
16. A substrate as claimed in claim 14 wherein the cationic polymer comprises amino groups selected from primary, secondary, tertiary and quaternary amino groups.
17. A substrate as claimed in claim 14 wherein the cationic polymer is selected from the group consisting of polyalkylenepolyamines and alkylated derivatives thereof, products of addition of alkylcarboxylic acids and polyalkylenepolyamines, products of addition of ketones and polyalkylenepolyamines, products of addition of aldehydes and polyalkylenepolyamines, products of addition of isocyanates and polyalkylenepolyamines, products of addition of isothiocyanates and polyalkylenepolyamines, products of addition of alkylene oxides and

polyalkylenepolyamines and products of addition of polyalkylene oxide block copolymers and polyalkylenepolyamines.

18. A substrate as claimed in claim 14 wherein the cationic polymer is polyethyleneimine.
19. A substrate as claimed in claim 14 wherein the cationic polymer is present in an amount from 0.01 to 10 g/m².
20. A substrate as claimed in claim 14 wherein the layer comprising a cationic polymer further comprises inorganic particulate material.
21. A substrate as claimed in claim 20 wherein the inorganic particulate material is selected from the group consisting of particulate silica, alumina, titanium dioxide and kaolin.
22. A substrate as claimed in claim 20 wherein the inorganic particulate material is present in an amount from 0.1 to 30 g/m².
23. A printing plate obtainable by the method as claimed in claim 1.